

CLAIMS

What is claimed is:

1. An anchor comprising:

a body defining a cavity, wherein the body has top and bottom ends;

5 a wedge portion that connects to the body using ACME threads, wherein the wedge portion encircles a support member received in the cavity; and

a compression ring disposed in the cavity, wherein the compression ring expands and contracts in response to movement of the wedge portion relative to the body, wherein the body and wedge portion are corrosion resistant.

10 2. The anchor of claim 1, wherein the wedge portion and the body are formed from a stainless steel.

3. The anchor of claim 1, wherein the wedge portion includes an upper surface having holes defined therein, wherein the holes receive pins on a key used to turn the wedge relative to the body, using the threads.

15 4. The anchor of claim 3, wherein the upper surface of the wedge portion includes at least three holes, wherein two of the holes are disposed opposite each other, on either side of the support member when the support member is received in the cavity.

5. The anchor of claim 1, wherein the wedge portion includes an upper surface that is substantially flush with an upper surface of the body when the anchor
20 engages the support member.

6. The anchor of claim 1, wherein the cavity has a diameter in the range of 1.4 – 1.6 inches.

7. The anchor of claim 1, wherein the threads are 2-4 ACME-2G threads.

8. The anchor of claim 1, further comprising a means for preventing the body from rotating relative to a ground surface in which the anchor is mounted, when the wedge is turned relative to the body.

5 9. The anchor of claim 1, further comprising an anti-rotation tab connected to the body.

10. The anchor of claim 9, wherein the anti-rotation tab comprises an electrical grounding means.

11. The anchor of claim 9, further comprising a grounding screw connected to the anti-rotation tab.

10 12. The anchor of claim 9, wherein the anti-rotation tab is connected to the body approximately midway between the top and bottom ends of the body.

13. The anchor of claim 1, further comprising:

a bottom plate connected to the bottom end of the body; and

15 a spacer positioned inside the cavity at a connection between the bottom plate and the bottom end of the body, wherein the spacer spaces the support member away from the bottom portion when the support member is received in the cavity.

14. The anchor of claim 13, wherein the spacer comprises a chamfered bottom corner that contacts a lower end of the support member when the support member is received in the cavity.

20 15. The anchor of claim 1, further comprising a spacer disposed in the cavity, wherein the spacer abuts the support member received in the cavity and spaces the support member away from other portions of the body.

16. An anchor for supporting a cylindrical support member, comprising:

means for receiving the support member;

means for releasably securing the support member received in the anchor by compressing a compression ring around the support member in response to a torsional force exerted on the means for receiving; and

5 means for preventing the anchor from moving relative to a ground surface in which the support member is positioned, in response to the torsional force.

17. The anchor of claim 16, further comprising means for centering a lower end of the support member within the anchor.

18. The anchor of claim 16,
10 wherein the means for receiving and the means for securing are both formed from a stainless steel; and

wherein the means for receiving engages the means for securing via threads; and further comprising means for preventing the means for receiving from forming a permanent bond with the means for securing, at the threads.

15 19. An anchor comprising:
a body that defines a cylindrical cavity having a length in the range of 4-6 inches;
and

a wedge portion that connects to the body, wherein the wedge portion includes an upper surface having a plurality of holes defined therein, wherein the holes receive
20 complementary pins on a key that is used to rotate the wedge portion relative to the body, and wherein the wedge portion encircles a support member received in the cavity, and wherein the upper surface of the wedge portion is substantially flush with an upper end of the body when the support member is received and secured in the cavity.

20. A key for adjusting a compression anchor, comprising:

a handle having first, second, and third elongated portions, each having first and second ends, wherein the second portion is disposed between and connected to the first and third portions such that the first end of the second portion is connected to the first end
5 of the first portion and the second end of the second portion is connected to the second first end of the third portion, and wherein the first and third portions are substantially parallel and the second portion forms an angle relative to the first and third portions; and

an engagement portion connected to the second end of the third portion of the handle, wherein the engagement portion has

10 first and second curved extension portions, that form a semicircle that wraps around a cylindrical support member received in the anchor, and

a plurality of pins connected to and extending outward from the engagement portions in a direction generally normal to a plane containing the first and third portions of the handle.